

Ontario. Ministry of Natural Resources

**Minfacts: Information on Ontario's
Mineral Resources**



Ministry of
Natural
Resources

CAD\$0.140
NR 140
- M 35

Information on Ontario's Mineral Resources

MINFACTS

ISSUE 5, August 1983

ISSN 0229-9348

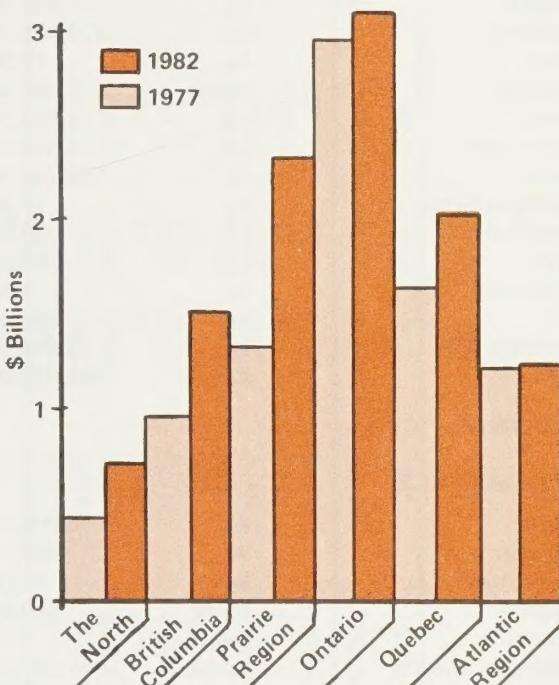
1982 IN RETROSPECT

Last year had its ups and downs. The number of claims staked kept the fourth largest staking rush in Ontario's history up for the third year in a row (see graph 1). However, mine closures, shutdowns to reduce inventory, and layoffs due to economic recession caused a lower value and volume of mineral output from that of 1981.

On the positive side, Ontario is still Canada's leading non-fuel mineral producer (see graph 2). And our metallic mineral production continues to be twice that of any other province — a full third of Canada's production by value coming from Ontario mines. Also, more than ten per cent of the world's dollar value of calcium, nickel, nepheline syenite, and uranium comes from Ontario. Thus mineral-based exports play a significant role in both the provincial and the federal economies, and help maintain some balance in Canada's international trading.

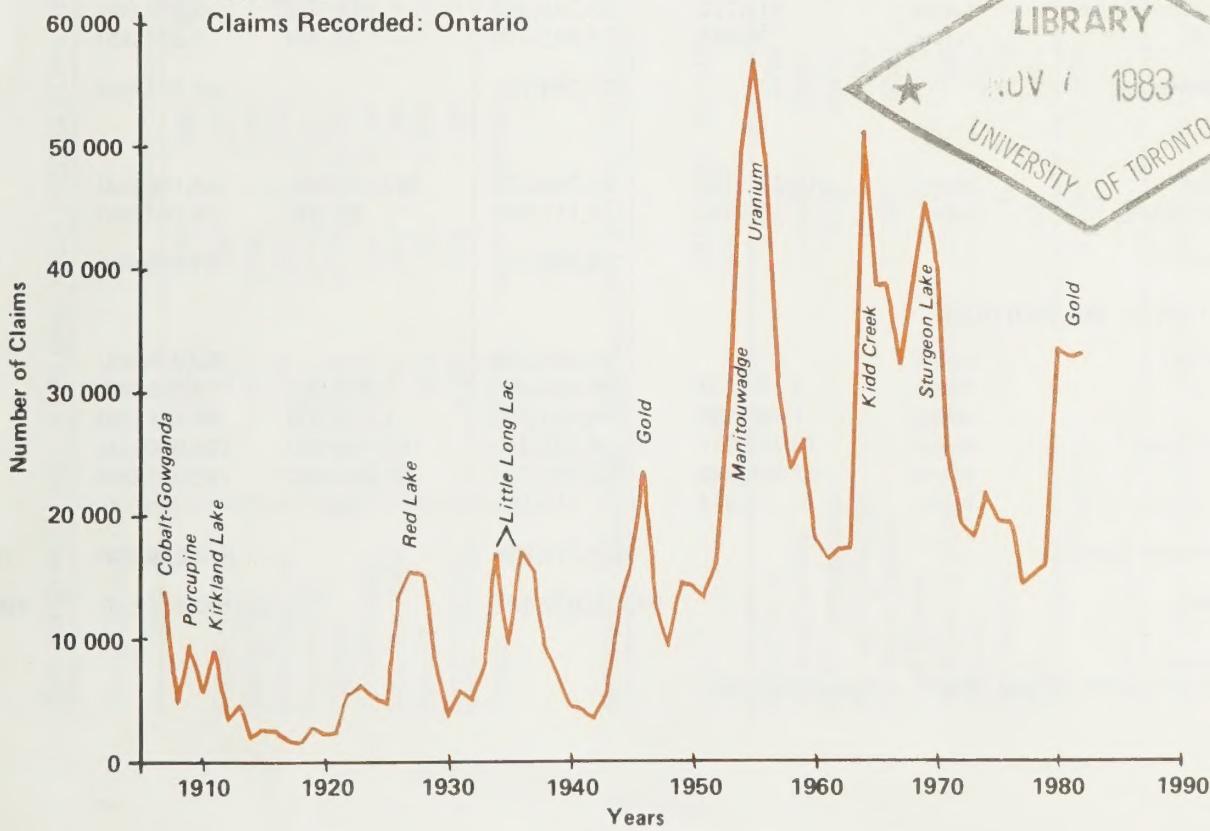
Ontario is Canada's largest producer of cadmium, cobalt, nickel and platinum group metals; uranium; nepheline syenite; salt; talc, soapstone and pyrophyllite; barite; sulphur recovered from smelter gas; plus each of the structural materials: sand and gravel, stone, clay products, lime, and cement.

GRAPH 2
Non-fuel Mineral Production†



† includes value of uranium

GRAPH 1
Claims Recorded: Ontario



MINERAL PRODUCTION IN ONTARIO

	UNIT	VOLUME	\$ VALUE	VOLUME	\$ VALUE	%
METALS						
Bismuth	kg	312	2,170	2,000	11,000	
Cadmium	kg	609,215	2,959,469	475,000	1,437,000	
Calcium	kg	469,403	3,512,073	329,000	2,304,000	
Cobalt	kg	1,831,319	94,392,310	1,188,000	36,976,000	
Copper	kg	226,384,780	521,019,544	172,873,000	336,307,000	
Gold	kg	18,308	333,797,134	19,802	293,856,000	
Iron Ore	tonne	5,394,620	245,462,549	3,748,000	187,309,000	
Lead	kg	3,383,521	4,008,744	6,251,000	4,527,000	
Magnesium	kg	8,548,042	29,439,456	7,630,000	22,890,000	
Nickel	kg	130,268,510	1,001,217,989	63,065,000	412,930,000	
Platinum Group	kg	11,905	136,239,362	8,590	98,889,000	
Selenium	kg	28,576	679,823	28,000	526,000	
Silver	kg	328,779	136,969,048	345,000	108,448,000	
Tellurium	kg	4,445	159,575	3,000	103,000	
Tin	kg	88,774	1,479,882	34,000	601,000	
Uranium (U)	kg	4,859,497	522,011,958	4,955,000	550,586,000	
Zinc	kg	246,030,807	286,283,503	256,483,000	275,204,000	
Total Metals			3,319,634,589		2,332,904,000	74.1%
NON-METALS						
Barite	kg	5,000,000	1,100,000	n.a.	1,000,000	
Feldspar	kg	960,000	18,000	
Gemstones	kg	50,000	54,000	n.a.	65,000	
Gypsum	tonne	649,546	5,477,033	506,000	4,506,000	
Magnetite	tonne	7,218	78,214	
Nepheline Syenite	tonne	587,565	17,531,692	518,000	17,338,000	
Peat	tonne	9,205	1,201,993	4,000	525,000	
Quartz	tonne	427,189	9,787,492	295,000	7,805,000	
Salt	tonne	4,968,503	80,888,513	5,479,000	97,701,000	
Serpentine Filler	tonne	3,672	487,906	
Soapstone, Talc, Pyrophyllite	tonne	18,229	2,591,565	n.a.	3,429,000	
Sulphur in smelter gas	tonne	417,772	16,735,943	214,000	12,673,000	
Sulphur (S)	tonne	29,065	1,842,410	22,000	1,870,000	
Total Non-Metals			137,794,761		146,912,000	4.7%
FUELS						
Natural Gas	cu.m.	419,271,420	34,556,335	407,000,000	38,195,000	
Petroleum (Crude)	cu.m.	89,983	11,111,980	89,000	13,764,000	
Total Fuels			45,668,315		51,959,000	1.6%
STRUCTURAL MATERIALS						
Clay Products	tonne	...	66,660,263	n.a.	50,946,000	
Cement	tonne	3,787,237	205,062,550	2,800,000	215,208,000	
Lime	tonne	1,836,168	94,699,716	1,463,000	99,484,000	
Sand and Gravel	tonne	70,191,371	134,335,610	60,000,000	125,000,000	
Stone	tonne	37,546,346	126,905,736	32,000,000	128,000,000	
Terrazzo Chips	tonne	1,947	110,691	n.a.	n.a.	
Total Structural Materials			627,774,566		618,638,000	19.6%
Grand Total			\$4,130,872,231		\$3,150,413,000	100.0%

p — preliminary

Source: Mineral Statistics Section, Ministry of Natural Resources

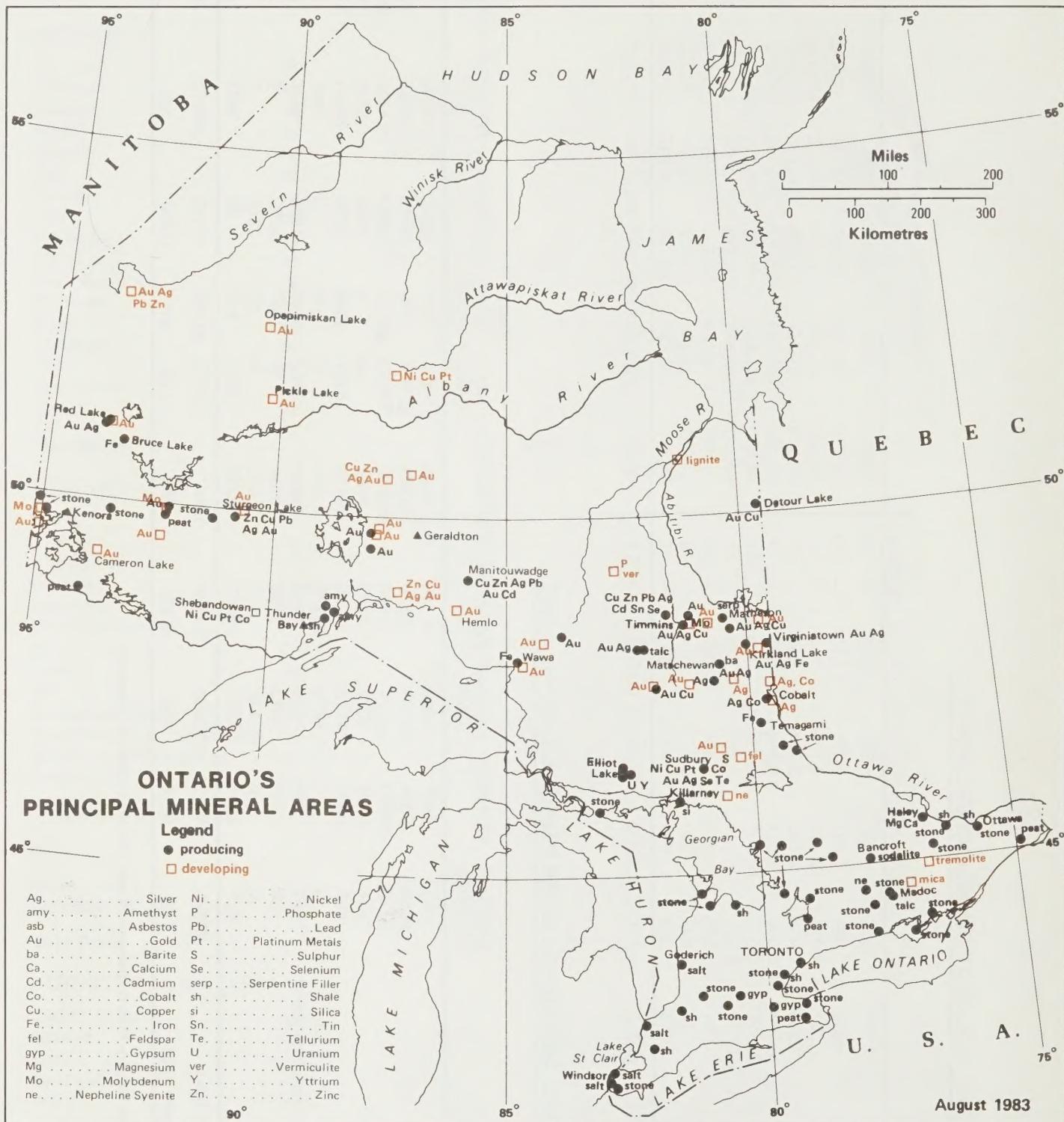
ONTARIO MINERAL EXPLORATION INDICATORS 1978-1982

Mining Division Offices	Claims Staked						Assessment Work Recorded (in man days of work)				% change '81 - '82
	1978	1979	1980	1981	1982	'81 - '82	1978	1979	1980	1981	
Kenora	808	984	1,877	2,121	1,579	- 26	34,934	24,167	21,368	72,732	68,438
Red Lake	1,207	1,065	2,220	1,719	942	- 45	50,997	62,949	71,975	106,872	118,775
Sioux Lookout	2,018	1,012	3,485	2,861	842	- 71	95,010	61,249	71,696	287,636	167,359
Thunder Bay	3,517	3,099	5,527	6,844	10,226	+ 49	51,299	101,799	127,288	280,765	292,273
Timmins	3,623	3,975	10,742	8,934	5,420	- 39	94,045	151,003	296,852	471,827	596,097
Kirkland Lake	1,710	4,261	6,299	5,498	3,253	- 41	87,143	68,672	209,358	247,087	313,690
Sault Ste. Marie	724	542	1,254	1,474	10,027	+ 580	71,455	28,429	15,420	43,873	81,755
Sudbury	645	694	1,948	3,087	671	- 78	31,873	19,336	22,897	79,774	70,123
Eastern Ontario	1,058	539	548	485	354	- 27	38,815	38,428	30,719	24,617	27,326
Totals	15,310	16,171	33,900	33,023	33,314	+ 0.9	555,571	556,032	867,573	1,615,183	1,735,836
											+ 7½

MINING DIVISIONS: ASSESSMENT WORK RECORDED (DAYS) – 1982

	EASTERN ONTARIO	KENORA	LARDER LAKE	PATRICIA	PORCUPINE	RED LAKE	SAULT MARIE	STE. MARIE	SUDBURY	THUNDER BAY	PROVINCIAL TOTAL
Manual Labor	302	1074	3062	48	1585	206	223	1047	1246	8793	8793
Diamond Drilling	9546	23524	99526	35329	91203	23967	2760	19719	133035	438609	438609
Geophysical Surveys	8372	26270	133511	73486	359970	79662	67833	35557	114805	899466	899466
Geochemical Surveys	1414	5765	1222	7163	2067	0	9	1126	5322	24088	24088
Geological Surveys	481	5330	17926	13980	36178	6787	3568	7374	24437	116061	116061
Land Surveys	0	0	1200	14770	300	0	48	2	1840	18160	18160
Rock Drills & Other Power Equipment	5851	368	17455	4019	21865	3259	4663	1666	9120	68266	68266
Bulldozer	733	2553	319	3099	9134	16	2167	2202	0	20223	20223
Core Specimens	0	0	134	0	543	0	52	1350	0	2079	2079
Other	627	3554	39335	15465	73252	4878	432	80	2468	140091	140091
Total Days	27326	68438	313690	167359	596097	118775	81755	70123	292273	1735836	1735836
Increase (decrease) from 1981	11%	(6%)	27%	(42%)	26%	11%	86%	(12%)	4%	7.5%	7.5%

Source: Mineral Statistics Section, Mineral Resources Branch, Ministry of Natural Resources



August 1983



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ISSUE 4, NOVEMBER 1982.

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MINING – ECONOMIC STIMULANT

In 1980, mining contributed to Ontario

- 44,000 jobs for people in mining, smelting & refining
- \$860-million for wages and salaries
- \$600-million for supplies
- \$300-million for fuel and electricity
- \$160-million in mining tax

Mining is the extracting of a portion of the Earth's crust for use directly or for further processing. The importance of this activity is great, yet little recognition is given to the miners and their rocky toil.

Miners work in various environments — in *pits*, removing unconsolidated sands, gravel, cobbles and boulders for use as aggregate — in *quarries*, removing rock for crushing into aggregate or industrial uses, or delicately wedging out blocks for decorative uses — and in *open pit and underground mines*, blasting and removing non-metallic and metallic rock for industry. As consumers, we seldom see these mined commodities directly except perhaps as a polished stone countertop, table, or flagstone patio.

A clock radio, a ball point pen, salt, a telephone, aspirin, toothpaste, or a glossy magazine aren't perceived as mined products. Yet, each of these items and many more exist only because of their mined mineral content.



Most of the millions paid out by Ontario mining groups in 1980 (see Table 1) went for services, processing supplies and wages. In addition, more than 31,000 families and households in Ontario depend directly on mining to earn their living. All this generates provincial and federal sales and income taxes which, in addition to the provincial mining tax paid, are used to benefit us all.

Ontario produced 36 per cent of Canada's metallic mineral value in 1981, contributing greatly to the 20 per cent of Canada's exports classified as minerals and mineral products. Sales of exported products are essential to maintain a favorable balance of payments. Unfortunately, as this review is being written, the world demand for Ontario minerals has fallen considerably from the conditions prevailing in 1980.

Primary mineral production is dependent upon world market prices, anticipated consumption rates, the interest rates on capital requirements and the amount of ore already mined out. High interest rates, high metal inventories, reduced market prices and reduced consumption have affected sales. Many mines have suspended operations until demand picks up.

However, part of the future appears golden. At Detour Lake work is proceeding toward production of nearly 250 ounces of gold per day in late 1983. Expansion programs for gold are underway at Timmins, and exploration and staking continues near Hemlo on what may become yet another gold camp in the province.

TABLE 1 – 1980 ONTARIO MINERAL PRODUCTIVITY

	Mining Employment	Production tonnes (ore milled)	Production Costs Paid \$
	as miners	total	
GOLD QUARTZ	2,148	3,150	101,745,797
URANIUM	2,987	4,848	213,318,879
IRON	989	2,261	138,156,347
COPPER-GOLD-SILVER	1,926	3,349	159,888,080
NICKEL-COPPER	8,952	11,704	418,615,120
SILVER-COBALT	144	237	6,539,337
NON-METALLIC	730*	1,303	49,786,612
STONE QUARRIES*	550	950	39,000,000
SAND & GRAVEL PITS*	2,000	4,300	35,644,807
CEMENT MANUFACTURERS	n.a.	1,248	109,497,023
CLAY PRODUCTS MANUF.	n.a.	1,158	38,911,038
LIME MANUFACTURERS	n.a.	423	34,061,200
1980 TOTALS	20,426+	31,671	\$1,383,164,240

excluding smelting and refining, and oil and natural gas.

includes *only* payments made for wages and salaries, fuel, electricity, and process supplies.

* approximation

ONTARIO MINING OPERATIONS 1982*

METAL MINES		INDUSTRIAL MINERAL MINES	
Nickel — Copper	FALCONBRIDGE NICKEL MINES LTD.	Amethyst	GUNNARD NOYES
East Mine	(susp. June)	Diamond Willow Mine	Pearl
Falconbridge Mine	(susp. June)	ONTARIO GEM COMPANY	161 Blucher St., Thunder Bay P7B 4Y6
Fraser Mine	(susp. June)	THUNDER BAY AMETHYST MINING CO.	Box 26, Thunder Bay P7C 4V5
Lockery Mine	(susp. June)		
North Mine	(susp. June)		
Onaping Mine	(susp. June)	Barite	EXTENDER MINERALS OF CANADA
Strathcona Mine	(susp. June)		Matchewan P0K 1M0
INCO LIMITED		Cement	CANADA CEMENT LAFARGE LTD.
Coleman Mine	(susp. March)		Woodstock Quarry
Copper Cliff South Mine	(susp. May)		Bath Quarry
Creighton Mine	(susp. May)		LAKE ONTARIO CEMENT LTD.
Frood — Stobie Mine	(susp. May)		Picton Quarry
Garsom Mine	(susp. May)		ST. LAWRENCE CEMENT CO.
Levack Mine	(susp. May)		Ogden Point Quarry
Little Stobie Mine	(susp. May)		ST. MARYS CEMENT LTD.
McCreedy West Mine	(susp. May)		Bowmanville Quarry
Shebandowan Mine	(susp. July)		St. Marys Quarry
Copper — Zinc — Lead		Granite	FAIRMONT GRANITE LTD.
KIDD CREEK MINES			Battersea Quarry
Kidd Creek Mine			Belmont Quarry
MATTABI MINES LTD.			NELSON GRANITE
NORANDA MINES LTD.			UNIVERSAL GRANITE COMPANY LTD.
"F" Group Mine			RIDEAU GRANITE
Lyon Lake Division		Gypsum	CANADIAN GYPSUM CO. LTD.
Geco Division			DOMTAR CONSTRUCTION MATERIALS
UMEX INCORPORATED	(closed April)		WESTROC INDUSTRIES LTD.
Thierry Mine			
Uranium		Lime	ALGOMA STEEL CORP. LTD.
AGNEW LAKE MINES LTD.			ALLIED CHEMICAL CANADA LTD.
DENISON MINES LTD.			BEACHVILLE LTD.
MADAWASKA MINES LTD. (closed June)			CHROMASCO LTD.
RIO ALGOM MINES LTD.			DOMTAR CHEMICALS GROUP
New Quirke Mine			GUELPH DOLIME LTD.
Panel Mine			REISS LIME CO. OF CANADA LTD.
Silver	AGNICO-EAGLE MINES LTD.		THE STEEL COMPANY OF CANADA LTD.
Beaver-Temiskaming Mine			Chemical Lime Works
Castle Mine			STEETLEY INDUSTRIES LTD.
PANCONTINENTAL MINING (CANADA) LTD. (susp. March)			Canada Crushed Stone
TECK CORPORATION			
Silverfields Division			

Gold

CAMPBELL RED LAKE MINES LTD.	Box 10, Balmertown P0V 1C0
CONS. LOUANNA GOLD MINES LTD.	Box 890, Geraldton P0T 1M0
DICKENSON MINES LTD.	
Dickenson Mine	Balmertown P0V 1C0
Robin Red Lake	South Porcupine P0N 1H0
DOME MINES LTD.	Box 781, DRYDEN P8N 2Z4
GOLDLUND MINES LTD.	Gen. Del., Beardmore P0T 1G0
GREENOAKS MINE	Box 278, Schreiber P0T 2S0
HAYES LAKE GOLD MINE	Virginiatown PQK 1X0
KERR ADDISON MINES LTD.	
KIDD CREEK MINES	Box 2002, Timmins P4N 7K1
NORTHERN CONCENTRATORS LTD.	
Pifher Twp. Prop. (susp. Aug.)	
PAMOUR PORCUPINE MINES LTD.	Bag 2010, Timmins P4N 7X7
Pamour Mine	Bag 2010, Timmins P4N 7X7
Pamour 2 (Halnor Mine) (susp. Jan.)	Bag 2010, Timmins P4N 7X7
Pamour 3 (Aunor Mine)	Holyte P0K 1C0
Ross Mine	Bag 2010, Timmins P4N 7X7
Schumacher Division	Bag 2010, Timmins P4N 7X7
Canadian Arrow (closed April)	Bag 2010, Timmins P4N 7X7
Hollinger Mine (Timmins Prop.)	Bag 2010, Timmins P4N 7X7
Romfield Property (susp. Sept.)	Bag 2010, Timmins P4N 7X7
PAN-EMPIRE JOINT VENTURE	Box 300, Beardmore P0T 1G0
WILLROY MINES LTD.	
Macassa Division	Box 550, Kirkland Lake P2N 3J7
Iron	Box 877, Kirkland Lake P2N 3K7
THE ADAMS MINE	Wawa P0S 1K0
ALGOMA STEEL CORP. LTD.	Red Lake P0V 2M0
Algoma Ore Division	Box 217, Temagami P0H 2H0
THE GRIFFITH MINE	
SHERMAN MINE	
Magnesium/Calcium	R.R. 1, Hately K0J 1Y0
CHROMASCO LTD.	

Marble Chip

GRENVILLE AGGREGATES	
STOKLOSAR MARBLE QUARRIES	(1969) LTD.

STEEP ROCK IRON MINES LTD.	Steep Rock Calcite Division
Nepheline Syenite	INDUSMIN LTD.
	I.M.C. CHEMICALS GROUP
Peat (horticultural)	ARCTIC PEAT MOSS CORP. LTD.
	ATKINS & DURBROW LTD.
	DU-NOR PRODUCTS

INDUSMIN LTD.	
	Box 280, Havelock K0L 1Z0

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INDUSMIN LTD.	

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STORY OF A MINE

The history of the Pater Mine is interesting. Here, traces of copper mineralization exposed in a railway cut near Spragge, Ontario, were sampled in 1954 and followed by diamond drilling until enough copper bearing rock was discovered to constitute an orebody.

The mineralized zone was only two to four metres wide, about 275 metres long, but extended downward 1,220 metres. A headframe and shaft were constructed within sight of Highway 17, and further diamond drilling performed to outline some 816,000 tonnes of "ore" (98.1 per cent waste rock, 1.9 per cent copper with minor silver and gold). As copper prices were then low, due to the end of the Korean war, a decision was made not to mine this mineralized rock until metal prices rose enough to make the rock into ore. In 1960, the mineralized rock was reassessed and production of ore at approximately 900 tonnes per day began on January 2, 1961. The mine closed when the ore ran out in April 1970 — slightly more than nine years later.

Today grasses, shrubs and trees are covering the remains of the minesite. And what of these few acres temporarily used for mining that were so productive for only nine years?

- 2,079,726 tonnes of ore were mined and trucked to a nearby mill.
- 35,696 tonnes of copper were recovered worth, when produced, \$31,776,942.
- 4,339 kilograms of silver were recovered worth, when produced, \$238,470.
- 144 kilograms of gold were recovered worth, when produced, \$173,734.

These metals are sought and produced for the simple reason that they are needed. We require copper for electrical devices, for coins, for brass and bronze, for wire and pipe. Gold is used in jewelry, coinage, dentistry, electrical contacts in microelectronics, as gold leaf and in heat reflective window glass. Silver is an essential ingredient in all black and white photography, and is also used in jewelry, tableware, solder, dentistry, special batteries and in the electronics industry.

This mine disturbed five acres of land for the minesite, roadways and other cleared land; plus another 67 acres of land for the millsite and tailings pond. A total of only 72 acres used for just 17 years from the start of exploration to the end of the mine. But these 72 acres directly employed an average of 179 people over nine years to produce \$32.2-million worth of metals. A substantial return to the people of Ontario for the temporary use of this land.

A great many possibilities exist for the after use of mined lands — from forest to parkland or community use. At Timmins, filled tailings ponds are now used for community parks and shopping centres. Elsewhere abandoned minesites are now hidden amongst trees and shrubs, interesting ruins for the hiker who happens upon them and good collecting sites for the rockhound. In southern Ontario, rehabilitated pits and quarries are used for growing crops, housing subdivisions, industrial parks and recreational uses (swimming, golf or community parks).

TABLE 2 – ONTARIO TOTAL ASSESSMENT WORK (IN DAYS)

Mining Division	1982	1981	1981	% change*
	Jan – Jun	Jan – Jun	Jan – Dec	82 vs 81
EASTERN ONTARIO	11 581	7 988	24 617	+ 45.0
KENORA	35 961	43 496	72 732	- 17.3
LARDER LAKE	153 955	123 924	247 087	+ 24.2
PATRICIA	132 114	124 439	287 636	+ 6.2
PORCUPINE	379 593	213 533	471 827	+ 77.8
RED LAKE	97 199	26 400	106 872	+268.2
SAULT STE. MARIE	54 803	18 640	43 873	+194.0
SUDBURY	50 117	17 546	79 774	+185.6
THUNDER BAY	152 107	110 342	280 765	+ 37.9
TOTAL	1 067 430	686 308	1 615 183	+ 55.5

NOTE: * [1982 (Jan-Jun) – 1981 (Jan-Jun)] / 1981 (Jan-Jun) x 100

Data from Mining Recorder's records and compiled by Mineral Statistics Section, Ministry of Natural Resources.



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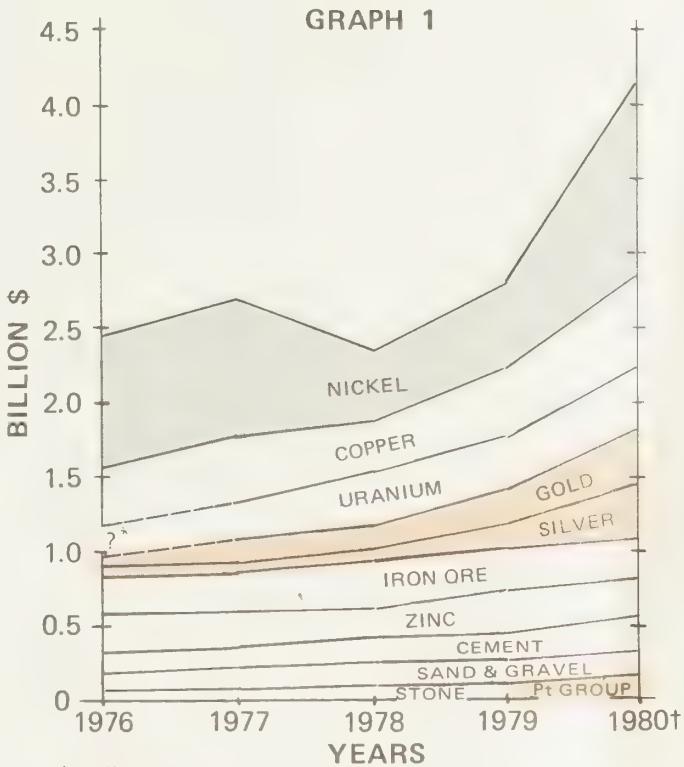
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ONTARIO'S TOP 10

Over the last 80 years, the lustre of Ontario's mining industry has always been metallic. The sparkle of nickel, copper, gold, silver, iron, and zinc usually grows brighter each year. And 1980 was no exception (see Graph 1). The volatility of nickel over the last 5 years is well shown against generally stable values for the sales of the other mineral commodities. Of special interest is the rising importance of the precious metals. The price increases of the last two years are well shown for gold and silver, however, it is not to be implied that this will necessarily continue. The value of platinum group metals (platinum, palladium, rhodium, iridium, ruthenium, osmium) rose enough to displace stone from the top 10 in 1980. Indeed, the value of all the precious metals mined in Ontario in 1980 was nearly \$900 million. The value of these precious metals as a proportion of Ontario's total metal mining, and some notable world events over the last 20 years, is presented in Graph 2.



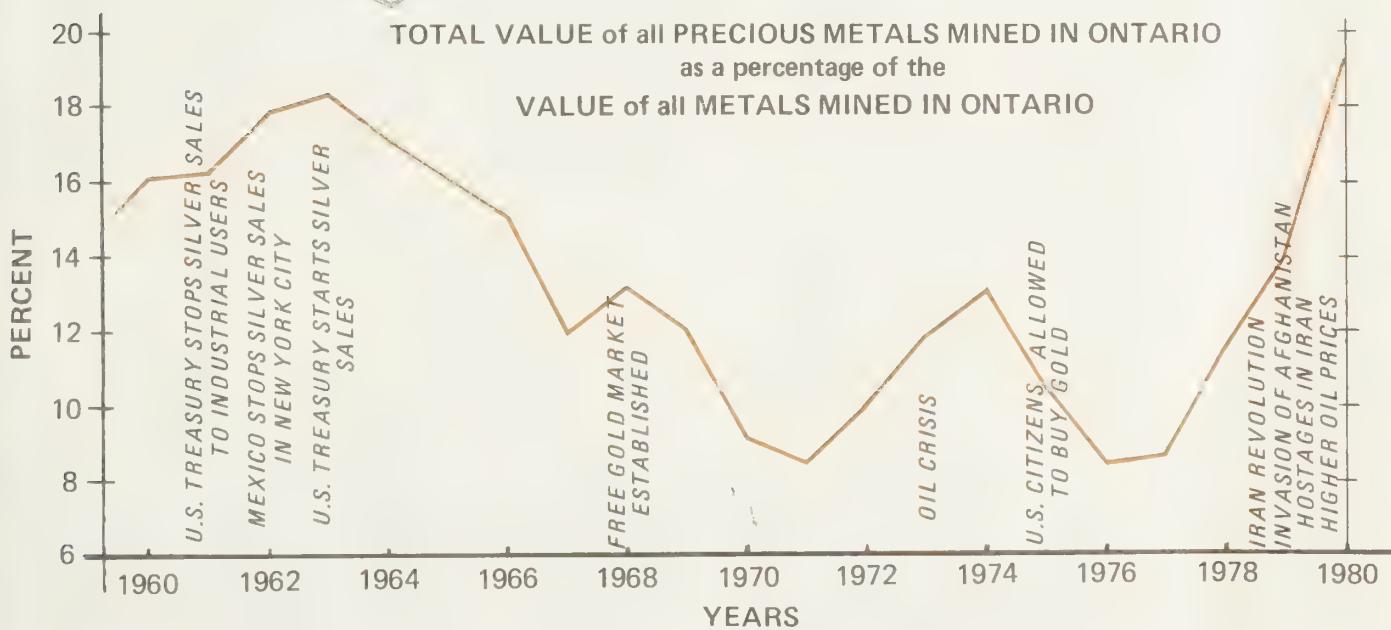
GRAPH 1



† preliminary figures.

* not reported, a figure of \$200 million has been arbitrarily chosen.

TOTAL VALUE of all PRECIOUS METALS MINED IN ONTARIO
as a percentage of the
VALUE of all METALS MINED IN ONTARIO



GRAPH 2

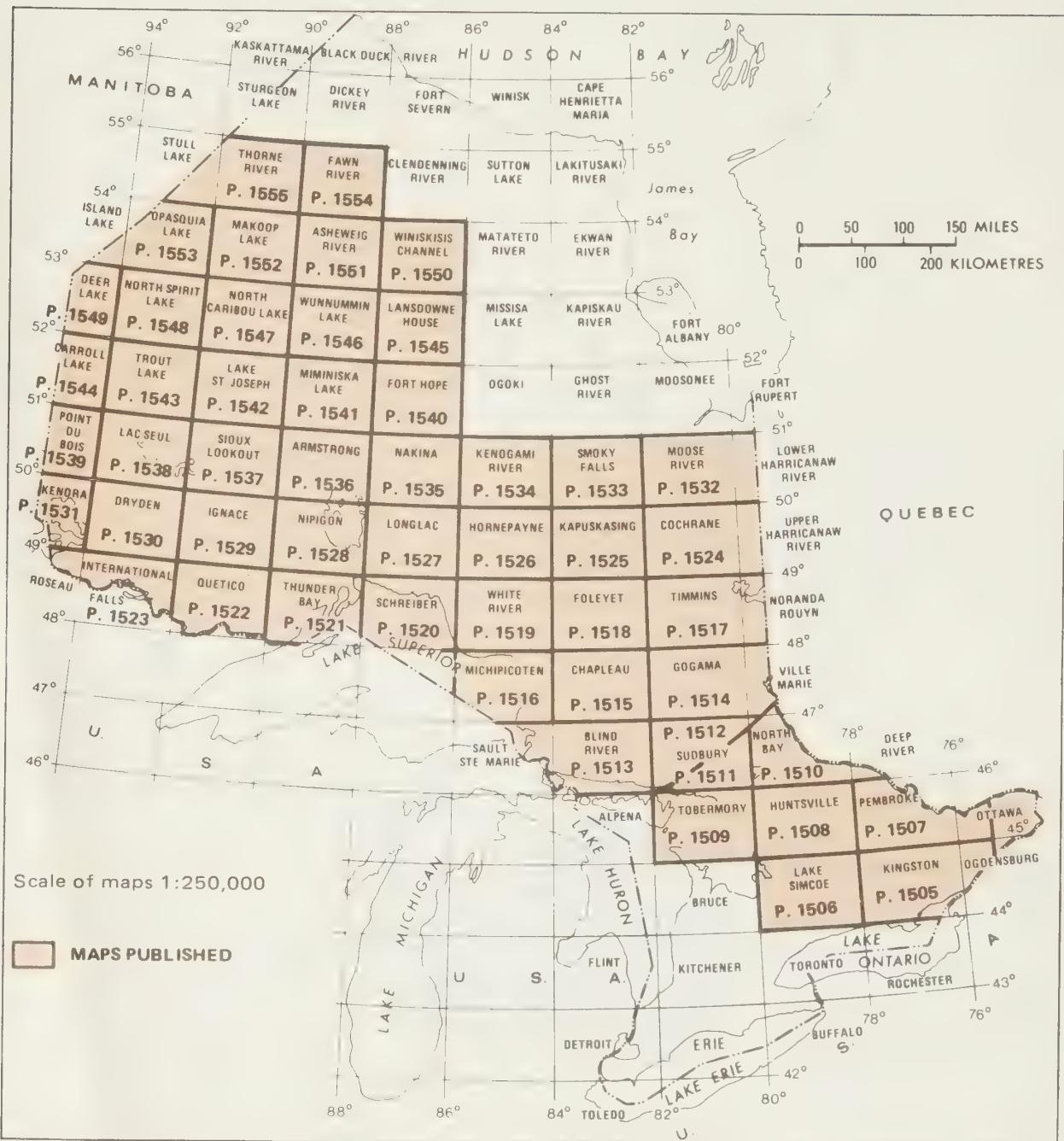
ONTARIO MINING OPERATIONS 1980*

METAL MINES		INDUSTRIAL MINERAL MINES	
Nickel – Copper		Amethyst	THUNDER BAY AMETHYST MINING CO. ONTARIO GEM COMPANY
FALCONBRIDGE NICKEL MINES LTD.			178 Margaret St., Thunder Bay, P7A 6W6 161 Blucher St., Thunder Bay, P7B 4Y6
East Mine	Falconbridge Mine	Barite	Matchewan, P0K 1M0
Lockerby Mine	North Mine	EXTENDER MINERALS OF CANADA	
Onaping Mine	Onaping	Cement	CANADA CEMENT LAFARGE LTD.
Strathcona Mine	Onaping		Woodstock Bath
			LAKE ONTARIO CEMENT LTD.
			Picton
INCO METALS CO.			ST. LAWRENCE CEMENT CO.
Clarabelle Mine	Copper Cliff, P0M 1N0		Ogden Point Quarry
Coleman Mine	Levack, P0M 2C0		ST. MARYS CEMENT LTD.
Copper Cliff South Mine	Copper Cliff, P0M 1N0		Bowmanville St. Marys
Creighton Mine	Creighton Mine, P0M 1P0		Gypsum
Frood	Frood Road, Sudbury		CANADIAN GYPSUM CO. LTD.
Stobie Mine	Garson, P0M 1V0		DOMTAR CONSTRUCTION MATERIALS
Garson Mine	Levack, P0M 2C0		WESTROCK INDUSTRIES LTD.
Levack Mine	Frood Road, Sudbury		Marble Chip
Little Stobie Mine	Levack, P0M 2C0		GRENVILLE AGGREGATES
McCreedy West Mine	Shebandowan, P0T 2T0		STOKLOSAR MARBLE QUARRIES(1969)LTD.
Shebandowan Mine			STEEP ROCK IRON MINES LTD.
Copper – Zinc – Lead			Steep Rock Calcite Division
CORPORATION FALCONBRIDGE COPPER			Nepheline Syenite
Sturgeon Lake Mine	Box 450, Ignace, P0T 1T0		INDUSMIN LTD.
MATTABI MINES LTD.	Box 190, Ignace, P0T 1T0		I.M.C. CHEMICALS GROUP
NORANDA MINES LTD.			
Geco Division	Box 100, Manitowadge, P0T 2C0		
SELCO MINING CORP. LTD.	Box 2000, Ear Falls, P0V 1T0		
South Bay Mine			
TEXASGULF METALS CO.	Box 2002, Timmins, P4N 7K1		
Kidd Creek Mine	Box 128, Pickle Lake, P0V 3A0		
UNION MINIERE EXPL. & MINING CORP. LTD.			
Thierry Mine			
Uranium			
AGNEW LAKE MINES LTD.	Box 1970, Espanola, P0P 1C0		
DENISON MINES LTD.	Box B-2600, Elliot Lake, P5A 2K2		
MADAWASKA MINES LTD.	R.R. 3, Bancroft, K0L 1C0		
RIO ALGOM MINES LTD.			
New Quirke Mine			
Peat			
ARCTIC PEAT MOSS CORP. LTD.	71 Queen St., Barwick, P0W 1A0		
ATKINS & DURBROW LTD.	Box 55, Port Colborne, L3K 5V7		
DIAMOND PEAT MOSS LTD.	Box 40, Newington, K0C 1Y0		
DIL-NOR PRODUCTIONS	Box 280, Havelock, K0L 1Z0		

Gold	CAMPBELL RED LAKE MINES LTD. DICKENSON MINES LTD. Dickenson Mine Robin Red Lake Mine	Box 10, Balmertown, P0V 1C0 Balmertown, P0V 1C0 Balmertown, P0V 1C0 South Porcupine, P0N 1H0 Virginia town, P0K 1X0	Killarney, P0M 2A0 Badgeley Island Quarry
Quartz	INDUSMIN LTD. Badgeley Island Quarry		
Salt	Roofing Granules 3M CANADA LTD.	Box 160, Havelock, K0L 1Z0	
Silver	PAMOUR PORCUPINE MINES LTD. Pamour Mine Pamour 2 (Hallnor Mine) Pamour 3 (Aunor Mine) Ross Mine Schumacher Division Canadian Arrow Matchewan Mine WILLROY MINES LTD. Macassa Division	Bag 2010, Timmins, P4N 7X7 Bag 2010, Timmins, P4N 7X7 Bag 2010, Timmins, P4N 7X7 Holytre, P0K 1C0 Bag 2010, Timmins, P4N 7X7 Bag 2010, Timmins, P4N 7X7 Bag 2010, Timmins, P4N 7X7 Box 550, Kirkland Lake, P2N 3J7	CANADIAN ROCK SALT CO. LTD. Ojibway Mine DOMTAR CHEMICALS GROUP Sifto Salt Division ALLIED CHEMICAL CANADA LTD. CANADIAN SALT CO. LTD. DOW CHEMICAL OF CANADA
Talc	AGNICO-EAGLE MINES LTD. Beaver-Temiskaming Mine Coniagas Mine Castle Mine SULPETRO MINERALS LTD. Canadaka Mines Ltd. TECK CORPORATION Silverfields Division	Bag 2010, Timmins, P4N 7X7 Box 2010, Timmins, P4N 7X7 Holytre, P0K 1C0 Bag 2010, Timmins, P4N 7X7 Bag 2010, Timmins, P4N 7X7 Bag 2010, Timmins, P4N 7X7 Box 590, Timmins, P4N 7E7	CANADA TALC INDUSTRIES LTD. STEETLEY TALC LTD.
Iron	THE ADAMS MINE ALGOMA STEEL CORP. LTD. Algoma Ore Division THE GRIFFITH MINE SHERMAN MINE	Box 877, Kirkland Lake, P2N 3K7 Wawa, P0S 1K0 Red Lake, P0V 2M0 Box 217, Temagami, P0H 2H0	R.R. 1, Haley, K0J 1Y0
Magnesium/Calcium	CHROMASCO LTD.		

*excluding fuels, clay, shale, sand & gravel, crushed stone for aggregate

ONTARIO GEOLOGICAL SURVEY—MINERAL POTENTIAL MAPS



The Ontario Mineral Potential Map Series, consisting of 51 maps, has been designed for those with little or no specialized knowledge of geology or the mineral industry. They present an evaluation of mineral potential on a province-wide basis, which can be used for resource and land use planning.

Each 1:250 000 map illustrates the bedrock and surficial geology. In addition it locates all known metallic and industrial minerals, representing the most up to date (1978) mineral compilation of Ontario.

In addition to explanatory notes, each map includes an account of Ontario's mineral industry and geology, a small inset map showing Ontario's bedrock geology, and lists of selected references and sources of information used.

Order from: Public Service Centre, Ontario Ministry of Natural Resources, Whitney Block, Queen's Park, Toronto, Ontario M7A 1W3. Price \$0.50 + tax.



Ministry of
Natural
Resources

Information on Ontario's Mineral Resources

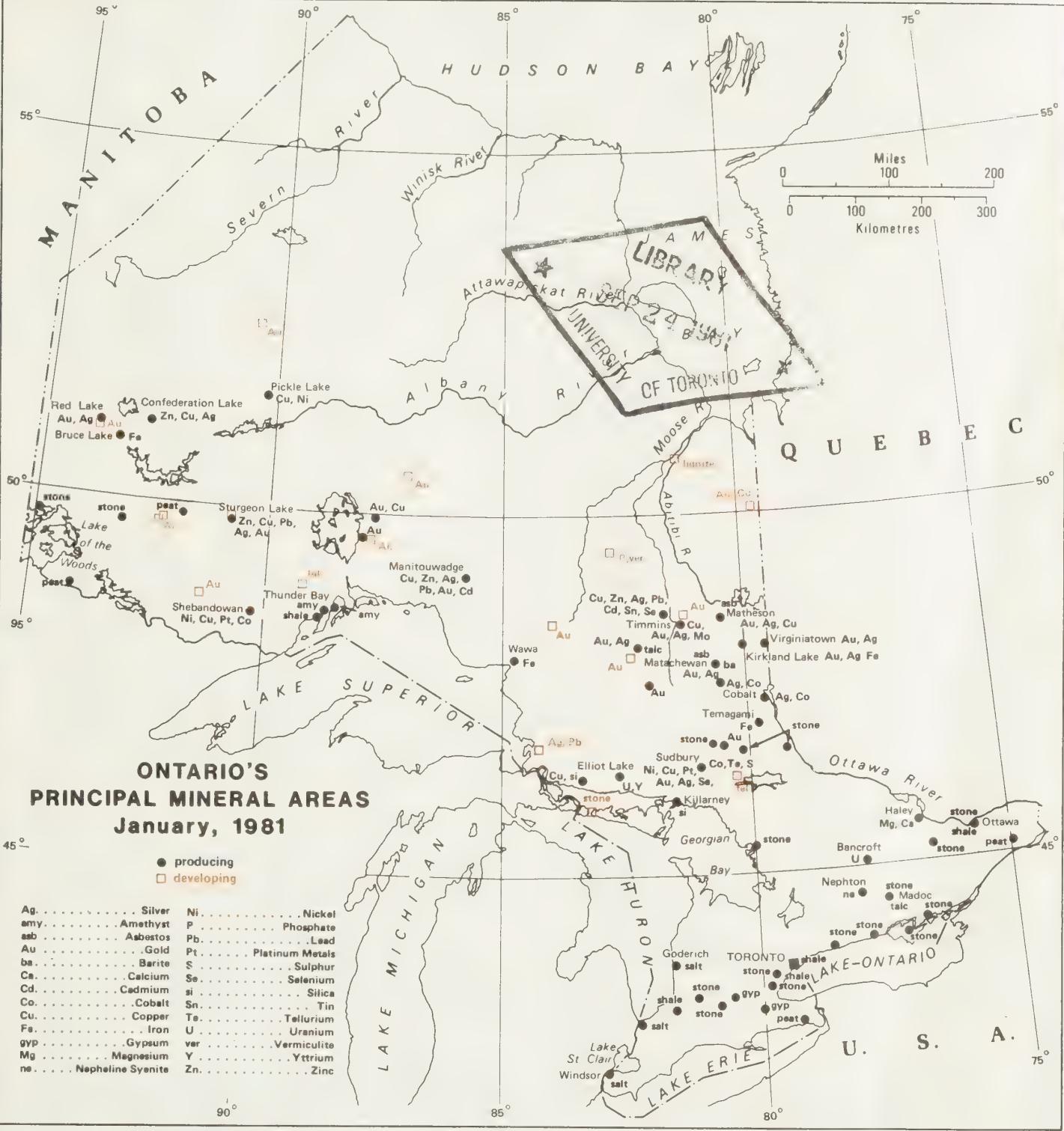
MINFACTS

ISSUE 1, JULY 1981

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CANADA
NR 140

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ONTARIO'S PRINCIPAL MINERAL AREAS

January, 1981

Ag.	Silver	Ni.	Nickel
amy.	Amethyst	P.	Phosphate
asb.	Asbestos	Pb.	Lead
Au.	Gold	Pt.	Platinum Metals
ba.	Barite	S.	Sulphur
Ca.	Calcium	Se.	Selenium
Cd.	Cadmium	si.	Silica
Co.	Cobalt	Sn.	Tin
Cu.	Copper	Te.	Tellurium
Fe.	Iron	U.	Uranium
GVP.	Gypsum	ver.	Vermiculite
Mg.	Magnesium	Y.	Yttrium
ne.	Nepheline Syenite	Zn.	Zinc

Welcome to MINFACTS. We would like to introduce ourselves, the Mineral Resources Group of the Ministry of Natural Resources, to you in this first issue. We give you MINFACTS, a periodic issue of news and statistics about ourselves and Ontario's mineral resources. We propose to notify you of our activities and progress and to provide the answers to the questions most frequently asked of us. To inform you of what is mined and where in Ontario, how much is mined and its value, who the mining companies are and how to contact them, what mineral exploration activities were submitted to the Mining Recorders, where the Ontario Geological Survey's field projects are to be, and how significant the minerals industry is to Ontario.

The Mineral Resources Group under the guidance of the Executive Coordinator, George Jewett is divided into three parts. This triumvirate is composed of the Ontario Geological Survey, the Mineral Resources Branch, and the Mining Taxation & OMEP Office.

The Ontario Geological Survey (OGS) under the direction of Ed Pye is responsible for examining and studying the rocks and minerals of Ontario and determining their geological distribution, so as to provide a data base for mineral exploration, land-use planning, and policy development concerning Ontario's resource base. The geological, geophysical, and geochemical surveys of the OGS identify favorable locations for mineral and aggregate deposits, delineate areas of mineral potential, and provide increased knowledge and understanding of the geological history of Ontario.

Directed by Tom Mohide, the main objective of the Mineral Resources Branch is to assure the orderly development and optimum use of our mineral resources in line with the Ministry's policy of broadening the base of mineral development and processing in Ontario. Thus, the most important function of this Branch is to provide in-depth researched information on mineral resources and to provide mineral policy options to government. The Branch's newly improved computerized data base and use of computer modeling allows accurate mineral resource analyses and forecasts for Ontario and the world.

The Mining Taxation and OMEP Office, directed by Kumara Rachamalla is responsible for administering: The Mining Tax Act, a revenue generating unit offering incentives to mineral producers for exploration, production, and processing within the province; and The Ontario Mineral Exploration Program (OMEP) Act, begun September 1, 1980, an incentive program for non-producers to aid in new mine development and in turn new sources of tax revenue.

In addition to the Mineral Resources Group, the Ministry of Natural Resources also provides through its regional field organization researched information on mineral resources. Eight Regional Mineral Resource Coordinators and fourteen Resident Geologists are located throughout the province to be of local assistance.

MINERAL PRODUCTION IN ONTARIO

	UNIT	VOLUME	\$ VALUE	VOLUME	\$ VALUE
METALS					
Cadmium	kg	672,837	4,795,677	665,000	4,919,000
Calcium	kg	455,713	2,152,146	525,000	3,033,000
Cobalt	kg	1,277,940	86,299,973	1,216,000	70,110,000
Copper	kg	192,946,145	457,472,114	233,297,000	611,232,000
Gold	g	19,172,867	221,473,644	18,360,000	387,925,000
Iron Ore	tonne	7,874,939	287,190,991	6,524,000	262,578,000
Lead	kg	6,968,696	9,206,177	10,268,000	11,217,000
Magnesium	kg	9,014,999	24,444,031	8,899,000	27,037,000
Nickel	kg	88,444,783	566,279,308	155,665,000	1,312,139,000
Platinum Group	g	6,156,716	56,333,561	12,584,000	155,480,000
Selenium	kg	18,325	581,356	44,000	1,101,000
Silver	kg	411,947	171,832,807	450,000	354,161,000
Tellurium	kg	3,130	161,667	5,000	236,000
Tin	kg	95,773	1,745,703	100,000	2,235,000
Uranium (U)	kg	4,005,263	375,793,251	4,275,000	413,481,000
Zinc	kg	289,357,404	278,881,182	262,594,000	252,409,000
Total Metals (82.7% of total)			2,544,643,588		3,869,293,000
NON-METALS					
Barite	tonne	...	596,000	...	750,000
Gemstones	kg	...	65,454	...	70,000
Gypsum	tonne	743,511	4,831,117	793,000	7,488,000
Nepheline Syenite	tonne	605,699	15,180,042	592,000	15,877,000
Peat	tonne	7,035	675,547	8,000	815,000
Quartz	tonne	980,279	8,965,420	1,294,000	10,108,000
Salt	tonne	5,188,664	67,900,216	4,800,000	72,358,000
Soapstone, Talc, Pyrophyllite	tonne	...	914,257	...	1,025,000
Sulphur in smelter gas	tonne	315,992	6,221,013	525,000	13,542,000
Sulphur (S)	tonne	20,293	673,199	22,000	1,200,000
Total Non-Metals (2.6% of total)			106,022,265		123,233,000
FUELS					
Natural Gas	'000 cu. m.	292,000	21,420,000	328,000	25,488,000
Petroleum Crude	cu. m.	92,000	8,259,000	97,000	9,447,000
Total Fuels (0.8% of total)			29,679,000		34,935,000
STRUCTURAL MATERIALS					
Clay Products		...	60,767,493	...	59,527,000
Cement	tonne	4,117,179	182,252,209	4,283,000	225,594,000
Lime	tonne	1,317,944	51,920,880	1,295,000	60,590,000
Sand and Gravel	tonne	90,515,630	151,847,457	121,254,000	174,900,000
Stone	tonne	39,830,992	113,477,990	34,019,000	132,000,000
Total Structural Materials (13.9% of total)			560,266,029		652,611,000
Grand Total (100%)			3,240,610,882		4,680,072,000

p — preliminary

Source: Mineral Statistics, Ministry of Natural Resources

Note: (% of total) refers to 1980 figures.

MINING DIVISION; SUMMARY OF TRANSACTIONS 1980

	EASTERN ONTARIO	KENORA	LARDER LAKE	PATRICIA	PORCU- PINE	RED LAKE	SAULT STE MARIE	SUDBURY	THUNDER BAY	PROVIN- CIAL TOTAL
Mining Claims Recorded	548	1877	6299	3485	10742	2220	1254	1948	5527	33900
Mining Claims Cancelled	721	788	1834	1391	1778	1115	1059	737	1836	11259
Claims in Good Standing	1699	3208	12622	7068	18753	4301	2465	3569	11245	64930
Prospector's Licences Issued	737	89	271	49	273	62	101	180	291	2053
Prospector's Licences Renewed	1011	54	275	49	268	75	80	168	283	2263
Quarry Permits Issued	187	—	—	—	—	—	—	—	246	433
Applications For Lease	80	14	17	511	454	14	8	14	14	1126
Inspections Performed	292	1	27	4	4	—	—	—	10	338
Commissioner's Orders (Extensions)	878	475	2628	1028	169	778	769	501	—	8726
Total Revenue	\$57419	32932	118020	86863	184230	39387	23555	39280	121314	703000

ASSESSMENT WORK RECORDED (DAYS)

	EASTERN ONTARIO	KENORA	LARDER LAKE	PATRICIA	PORCU- PINE	RED LAKE	SAULT STE MARIE	SUDBURY	THUNDER BAY	PROVIN- CIAL TOTAL
Manual Labour	892	892	3819	217	7447	495	260	203	722	14947
Diamond Drilling	17648	15428	64454	42633	59993	38482	7099	7008	53418	306163
Geophysical Surveys	6665	3149	115031	13524	212208	30240	4430	5848	57483	448578
Geochemical Surveys	171	36	388	1052	—	—	—	280	6923	8850
Geological Surveys	2822	859	10981	2706	5246	871	1496	1020	5372	31373
Land Surveys	—	12	880	10800	470	560	2	360	80	13164
Rock Drills & Other Power Equipment	1835	382	5934	182	4308	385	186	759	1006	14977
Bulldozer	120	502	1345	—	369	288	693	2326	1135	6778
Core Specimens	99	—	50	36	482	—	9	—	676	676
Miscellaneous	467	108	6476	546	6329	654	1245	5093	1149	22067
Total Days	30719	21368	209358	71696	296852	71975	15420	22897	127288	867573

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